December 1, 1950.

Dr. B. A. D. Stocker,
Department of Bacteriology,
London School of Hygiene and Tropical Medicine,
London, England.

Dear Dr. Stocker:

My colleague, Dr. S. G. Knight, has just written to me that you are planning to apply forca fellowship to travel to the United States, and to carry out some work in the area of bacterial genetics. He asked whether I would not suggest a few laboratories in this country which might be carrying on work of interest to you, and which you might name in your applications. This I shall be very glad to do, but I hope you will not be displeased if I place this institution on such a list.

Your paper [for a reprint of which I thank you herewith] on the dynamics of mutation in Salmonella typhimurium was a most competent and skillful job. It was of special interest to us here, as Mr. Zinder and I have been working for two or three years on the possibility of genetic recombination in this genus. Very recently, fairly convincing evidence of recombination between strains of S. typhi-murium has been uncovered, along the lines worked out for Escherichia coli K-12 by E. L. Tatum and myself. We are planning to investigate the transmission of antigenic determinants. If this type of approach appeals to you, we would welcome your collaboration, as a visiting fellow.

At present, our bacterial genetic work is confined rather closely to Enterobacteria, but I am hoping that we can eventually conduct rather broader surveys of other bacteria for recombination, which I regard as the most incisive tool of genetic investigation. Our work with E. coli includes physiological-genetic studies of enzyme formation; formal genetics; virus-bacterium associations; cytological studies - primarily comparisons of haploid and diploid cultures, and the effects of radiation; and lately, the genetic differences between independent strains. The latter follows from the recent successful search for a considerable number of fresh isolations of E. coli which can be crossed with each other, and offers another fertile area for serological work.

We are a small group, working in a small but well-equipped laboratory. Starting about ten months from now, however, I anticipate space reallocations which should make it possible to accomodate visiting investigators such as yourself. If this schedule is consistent with your plans, I should be

pleased to have a formal request for laboratory accomodations.

As to other institutions, very few are doing genetic work on pathogenic bacteria. You might perhaps wish to enquire of the following:

Dr. C. M. MacLeod, Dept. Microbiology, New York University College of Medicine
[Pneumococcus transformations]

Dr. M. Demerec, et al., Dept. Genetics, Carnegie Institution, Cold Spring Harbor L.I., N.Y.
[Drug resistance; mutagens]

Dr. S.E. Luria, Dept. Bacteriology, University of Illinois, Urbana.
[Bacteriophage genetics]

Dr. Harry Eagle, Microbiological Institute, National Institutes of Health, Bethesda 14. Maryland.
[Drug resistance; setting up a new program of broad scope- I have no details]

Dr. A. Novick, Institute of Radiobiology and Biophysics, U. of Chicago, Chicago 37, Ill.
[Dynamics of mutation in E. coli under controlled growth conditions].

A roster of workers in bacterial genetics and ancillary fields can be found in various numbers of a private "Microbial Genetics Bulletin", but I note that you are already a recipient.

Yours sincerely,

Joshua Lederberg,
Associate Professor of Genetics.